MANAGEMENT
SYSTEMS
in the
FOREST SERVICE



A Brief Description of the Systems and Their Correlation

U.S. Department of Agriculture

Forest Service

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# **Preface**

The Forest Service, Department of Agriculture, has worked more than half a century to evolve and perfect management systems aimed at achieving its basic purpose, that of effectively serving the people of the United States.

This brief account presents the management systems presently in use. These have been developed, revised, and improved over the years in keeping with management needs. A continuing review and check of the systems keeps them dynamic and responsive to the changing needs of internal management and the public.

The concepts of public service and employee-management relations are fostered through the management system described here. Service to the public is the true measure of Forest Service program management and accomplishment.

How well the Forest Service serves the public depends upon the people who carry out its programs. To do their best, an orderly management system is necessary, for Forest Service employees can only develop and perform according to the effectiveness of the management system. Conversely, the management system is effective according to how well it is oriented to the needs of Forest Service employees.

The philosophy and attitude of Forest Service management is oriented toward its people. One primary objective is to maintain a management system which organizes, motivates, and develops the talent and power of all individuals. Emphasis is placed on self-responsibility, self-reliance, self-determination, and devotion to Forest Service objectives.

This booklet has been prepared to acquaint new employees with Forest Service management systems, their correlations, and their use in meeting program goals. It is intended to give them a brief, overall look at these systems so that the detailed procedures covered in the Forest Service Manual will be more understandable and will be seen in their proper perspective. A previous booklet covering a broader field and entitled "Organization and Management in the Forest Service" was prepared to accomplish a similar purpose. Both booklets may also be used to answer requests for general management information from Government agencies, foreign trainees, and others interested in the Forest Service systems.

Acknowledgment is made of Forest Service personnel who contributed to the development of this booklet. Special mention should be made of Herbert H. Scherer, Donald W. Smith, Max W. Cluff, Harvey B. Mack, Howard E. Marshall, Edward W. Schultz, Morris Mash, Clint Davis, C. K. Lyman, Gordon D. Fox, and Clare W. Hendee.

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Edward P. Chif

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# MANAGEMENT SYSTEMS IN THE FOREST SERVICE

# A Brief Statement of the Systems and Their Correlation

# Introduction

In describing the principal management systems used by the Forest Service, the recreation resource will serve throughout this booklet as an example in the application of each system. It should be noted, however, that the systems are equally applicable to each of the other resources on the National Forests. With some slight variation, they are also applied in the research program and in the State and private forestry cooperative program.

The chart below shows the several management systems, their correlation, and interrelationships.

To provide a background for the management systems, let us briefly review the activities of the Forest Service and the legislative authorities, objectives, and policies that make for positive management.

# Major Forest Service Activities

The Forest Service, under the direction of the Secretary of Agriculture, is responsible for applying sound conservation and utilization practices to the natural resources of the National Forests and National Grasslands. It also has the responsibility of promoting these practices among all forest landowners through example, cooperation, research, and the dissemination of information.

Work of the Forest Service includes three major activities: (1) Management of the National Forests and National Grasslands; (2) cooperation with States and private forest landowners; and

(3) forest and range research.

1. Management of National Forests and National Grasslands.—The 154 National Forests and 18 National Grasslands contain 186 million acres in 41 States and Puerto Rico. On these public lands timber, water, forage, wildlife, and recreation are managed to meet present and future public needs, both local and national.

National Forest timber is managed on a sustained yield basis, the amount cut each year approximating that which is grown. Applied forestry and the sustained yield principle are prerequisites for assuring adequate future crops of high-quality timber.

Watersheds are managed to regulate streamflow, control floods and erosion, serve as waterstorage areas, and supply clear, clean water for agriculture, industry, recreation, and domestic use. Much of the Nation's water flows from National Forest lands.

Ranges are managed to conserve the land and its plant cover, and provide forage for livestock and wildlife.

Wildlife, too, is managed in cooperation with State fish and game authorities as a renewable crop. The aim is to have the forest support a large and varied wildlife population in harmony with the food and cover conditions and recreational uses. Hunting and fishing are permitted in the National Forests under State law to provide sport for millions and to harvest the game and fish crop.

The recreation resource is managed to best serve the ever-increasing number of people who use the National Forests for sport and relaxation. Facilities include family picnic spots, camping and sports areas, and extensive wilderness tracts.

A major responsibility of National Forest management is to protect the resources in its care from

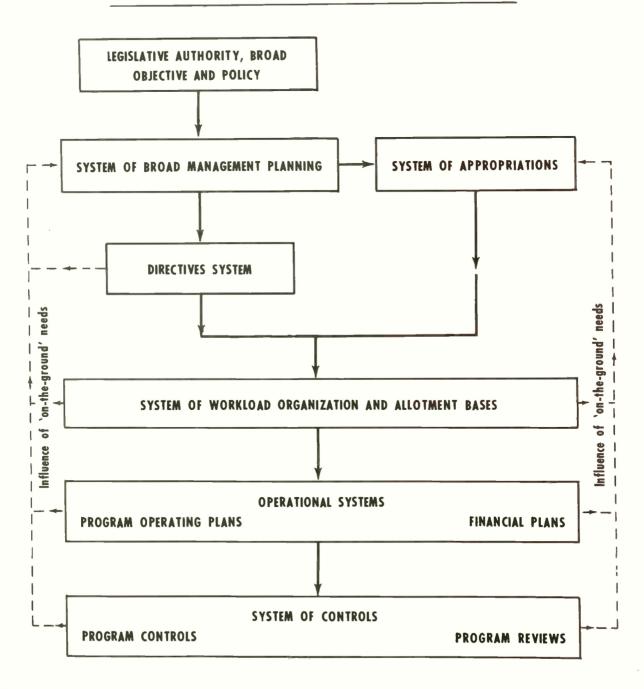
fires, insects, and disease.

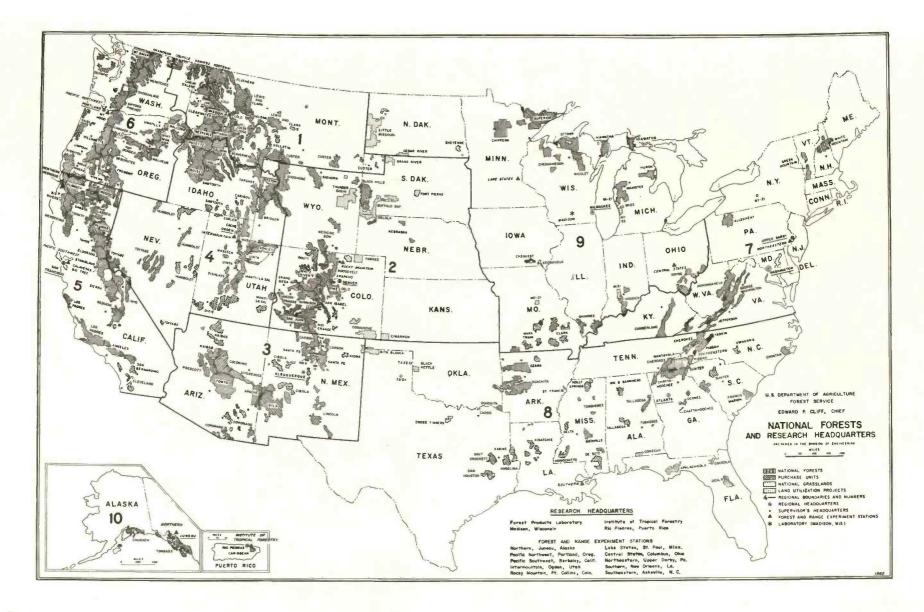
The practice of managing all forest resources harmoniously for the benefit of the greatest number of people is known as "multiple use." This is a cardinal National Forest management principle as emphasized by the Congress in the Multiple Use-Sustained Yield Act of June 12, 1960 (Public Law 86-517).

Multiple use means the management of all renewable surface resources of the National Forests so that they are utilized in combinations that will best meet the needs of the American people; making the most judicious use of the land for some or all of these resources or related services over areas large enough to provide sufficient latitude for periodic adjustments in use to conform to changing needs and conditions; and harmonious and coordinated management of the various resources, each with the other, without impairing the pro-

ductivity of the land. In multiple use management, consideration is given to the relative values of the various resources and not necessarily to the combination of uses that will give the greatest dollar return or the greatest unit output. Sustained yield of National Forest resources means the achievement and maintenance in perpetuity of a high-level annual or regular periodic output of these resources without impairing the productivity of the land.

## Correlation and Interrelationship of Management Systems

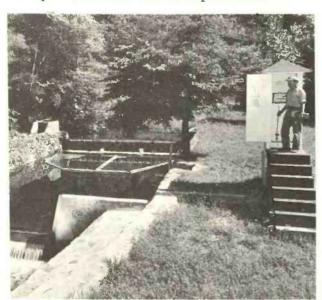




2. Cooperation with States and Private Forest Landowners.—Forest land covers one-third of the total land area of the continental United States. The Forest Service cooperates with State agencies and private forest owners to: (a) Better protect the 435 million acres of State and privately owned forests and critical watersheds against fire, insects, and diseases; (b) encourage better forest practices for conservation and profit on the 358 million acres of private forest land; (c) aid in distribution of planting stock for forests, shelterbelts, and woodlots; (d) stimulate development and proper management of State, county, and community forests.

3. Forest and Range Research.—The Forest Service carries on forest and range research through its 10 regional experiment stations, the Forest Products Laboratory, and the Institute of Tropical Forestry in Puerto Rico. Scientists study the growth and harvesting of timber; protection of forests from fire, insects, and diseases; management of rangelands; protection and management of watersheds; efficient and economical utilization of forest products; and forest economics. A continuing forest survey provides comprehensive information on the extent and condition of forest lands; the volume and quality of timber resources; trends in timber growth and harvest; and outlook for future supplies and demands.

Other activities, worked in conjunction with the three major ones mentioned, include building and maintaining forest roads and trails; acquiring and exchanging lands for more efficient management; flood prevention and watershed protection.



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Research and management work toward improving the quality and quantity of water that flows from National Forest watersheds to the home, farm, or factory. The Forest Service's Coweeta Hydrologic Laboratory in North Carolina is one of the installations engaged in such work. It coordinates several scientific and technical fields in its studies of this vital resource.

# National Forest Management—Historical Background

The Creative Act of Congress, approved March 3, 1891, empowered the President to establish forest reserves from the public domain. These reserves were closed areas and there was no provision for their administration. The Organic Act of June 4, 1897, outlined a system of organization and management for the forest reserves and opened them to public use.

In 1905, Secretary of Agriculture James Wilson laid down basic principles for the management of these lands, which said in part: "In the administration of the forest reserves, it must be clearly borne in mind that all land is to be devoted to the most productive use for the permanent good of the whole people. . . ." Two years later, the managed reserves became known as the National Forests. Congressional recognition of the Forest Service's long-standing policy concerning the management of National Forest lands—i.e., the continuous use and development of such forest resources as water, timber, forage, wildlife, and recreation for the greatest good of the greatest number—came about with the passage of the Multiple Use-Sustained Yield Act of 1960.

Other Congressional acts, some dating back to the 19th century, broadened the responsibility of the Forest Service in the general field of forestry. The McSweeney-McNary Act of May 22, 1928, provided the Service with a charter for extensive forest research programs on National Forest lands



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One of the families counted in the over 100 million annual visits to the National Forests during the past few years. Intensified management and development of the recreation resource make it possible for more families to enjoy the many outdoor activities on the Angeles National Forest in California, as well as on all other National Forests throughout the country.

and on State and private lands. A systematic program of Federal and State cooperation in forestry was made possible by the Weeks Act of 1911, the Clarke-McNary Act of 1924, and the Norris-Doxey Cooperative Farm Forestry Act of 1937.

Given these broad authorities and objectives, the Forest Service early recognized recreation, our chosen example in management for this booklet, as a resource meriting full development. In 1915, a Term Permit Law authorized the issuance of term permits for summer homes, hotels, stores, and other structures needed for recreation or public

convenience. Setting aside primitive areas was begun in 1928. Objectives and management polices relating to recreation were established during the early period of forest resource use. These have been broadened and progressively changed through the years to keep up with the increased demands for outdoor recreation.

#### References

U.S. Department of Agriculture, Forest Service: Forest Service Manual, codes 1010 and 1030.

# The System of Broad Management Planning

Forest Service responsibility in the field of forestry includes broad management planning to adequately meet present and future forestry needs of the Nation.

### Overall Conservation Planning

Broad management planning is based on searching analysis of resource capabilities and of present and future public demands on the resource. The Forest Service, from time to time, engages in comprehensive nationwide surveys for this purpose. The Timber Resource Review, published in 1958, is an example of such a survey.

The Forest Service redeems its responsibilities for providing recreation opportunities to the public by a continuing review and overall appraisal of present and future recreation needs, and of the adequacy of the resources to serve these needs.

Examples of recreation studies basic to program planning and legislation are:

a. The nationwide survey, "Outdoor Recreation for America." This survey was made and published by the Outdoor Recreation Resources Review Commission. The Bureau of Outdoor Recreation was established in the Department of the Interior upon the recommendations of this Commission. It has an advisory function with respect to outdoor recreation on all Federal lands.

b. The nationwide "National Forest Recreation Survey." This survey provides an inventory and evaluation of recreation resources and other significant recreation information needed for sound planning.

Based on such reviews and appraisals, broad and comprehensive action plans and legislation are formulated.



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Timber management plans call for a progressive rise over the years in the amount of timber to be sold on the National Forests. Thus far, almost 1 billion dollars has been sent to the Treasury of the United States as a result of timber sales on these Federal lands. Shown here is a residual stand of timber after a logging operation on the Inyo National Forest in California.

## Long-Range Planning

Long-range resource plans spell out the action needed to meet the anticipated demands on the

resource.

The primary objective of long-range recreation planning is the orderly protection, development, and use of the recreation resource. To meet present and projected future demands for forest recreation, these plans must be based on the best available measurements, estimates, and forecasts. Long-range recreation plans are guides for the development, protection, and management of lands that are predominantly valuable for recreation and that have been reserved for and dedicated to this use. These plans include:

a. Regional Long-Range Recreation Planning.

—This consists of the establishment of objectives, policy, guidelines, and summaries of pertinent rec-

reation data.

b. National Forest Recreation Management Plans.—These are prepared for each National Forest. They are assembled as a composite of Ranger District projections, goals, and programs, and are organized to segregate pertinent information needed to manage the recreation resource at the District level.

c. Recreation Area Plans.—These are prepared for areas of National Forest lands that are primarily suitable for recreation development and use. Area plans amplify National Forest recreation management plans. They contain the functional detail and direction needed by forest officers to attain recreation management objectives. Area plans express the intent of management as to the allocation of recreation resources to the several kinds of recreation use. They also detail the specific coordinating measures to be applied to the management of recreation for the benefit of the other resources. Objectives as well as priorities for the highest or supplementary recreation uses of each area are definitely established.

d. Recreation Site Plans.—These are prepared for tracts of National Forest land to be developed for a single recreation use, or for a group of closely related uses. Site plans are closely coordinated with the area plan and are prepared prior to any development, rehabilitation, or enlargement. These plans indicate the location and design of the recreation improvements. They also provide for the proper utilization of the site. Site development must conform with approved site plans.

e. Recreation Project Plans.—These are summarized for reference by administrative levels as a part of the Service-wide Project Work Inventory. Inventoried recreation projects are activated as the need, finances, and circumstances warrant.

## The Development Programs

Development programs are specific proposals in terms of work to be done and its cost. They are a correlated summary of "on the ground" inventories of work needed to meet stated goals and policies. Development programs become the basis

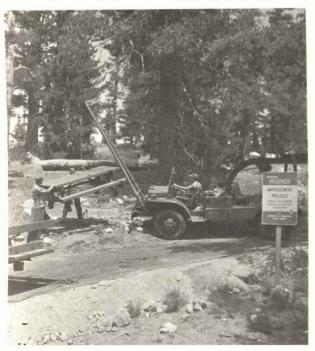
for appropriation requests.

a. For the National Forests.—Estimates of the needs and costs of the development of the National Forest resources for public use are contained in the 10-year Development Program for the National Forests, dated November 1961. These needs and costs are summarized on a national and State basis. Recreation work needed for the 10-year period is shown in the program as in table 1.

b. Research Program.—The Forest Service engages in systematic programing of research needed to adequately support forestry activities on National Forests, other public lands, or on private lands. Research on forest recreation problems is an important part of the Service research program. Recreation-problem research includes determinations of the most efficient physical layouts for recreation sites; elimination of natural haz-

Table 1.—National Forest Program—Summary of Work and Costs—Fiscal Year 1963 Through Fiscal Year 1972. Based on Dollar Value as of May 15, 1961

Item	Recurrent work annual level, 10th year	Non-recurrent project work, 10-year total	Work needed							
Recreation—Public Use	(\$1, 000) 47, 376	(\$1, 000)	Complete management and development plans.							
		408, 720	Maintain facilities and provide sanitation and cleanup to handle the anticipated impact of recreation visits by 1972.  Reconstruct and rehabilitate more than 2,000 existing campgrounds and picnic sites. Plan and develop 4,000 other recreation sites including swimming, boating, winter sports, and public service sites. Provide special development and information service for outstanding scenic and recreation features which attract heavy visitor concentrations.							



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The Development Program for the National Forests, based on careful surveys, projections, and planning, aims at improving or developing recreation and other facilities in keeping with the public's growing demand for them.

ards, including those of sanitation; efficient recreation business administration; development of guides for measuring carrying capacities on various recreation area types; data needed to plan wild and wilderness area administration; modification of other uses to enhance forest recreation; development of measures to rehabilitate overused areas; and ways to evaluate current recreational use and future requirements.

c. For State and Private Forestry Cooperative Program.—Good management and protection of State and private forest lands by State governments are encouraged and assisted by the Federal Government through matching-fund cooperative programs. Development of State and private forest land resources is programed cooperatively with individual States. The recreation resource of State and private lands receives consideration and it benefits indirectly from the cooperative protection and management programs.

### References

U.S. Department of Agriculture, Forest Service: Forest Service Manual, code 1310.

—— Organization and Management in the Forest Service, chap. 4, 1962.

— A Summary of the Timber Resource Review, 1958.
Outdoor Recreation Resource Review Commission: Outdoor Recreation for America, 1962.

# The System of Appropriations

The administrative branch of the Government is responsible for presenting to Congress a pro-

posed program and budget.

Annual budget formulation is accomplished jointly by the agency, Department, and the Budget Bureau for the Administration. Agency proposals are carefully reviewed to be certain they are fully justified, and can be provided for within the total budget. This process insures that the urgency of public need is fully considered and that financing is provided for those needs of highest priority consistent with national objectives and available funds.

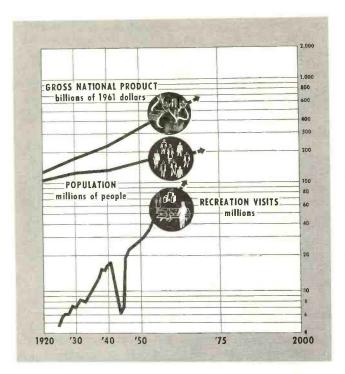
Financing of the recreation activity is accomplished through this process. The Forest Service submits total program proposals to the Department for consideration. Recreation is properly integrated on a priority basis into these proposals. The Department reviews the program requests and determines the scope of program proposals to be incorporated into the total Department budget. The Department budget is then reviewed by the Budget Bureau to ascertain the extent to which the Department proposals can be incorporated into the total national budget. At each review level, detailed justification statements are presented in support of budget requests, and hearings are held

to complete the review of such requests to insure that all proposals are properly considered. The Budget Bureau then makes budgetary allowances for the Department and its agencies and, when considered appropriate, sets levels of financing for individual program proposals. This then becomes the President's Budget.

The President submits his budget request to the Congress for legislative approval. Detailed justification statements are furnished to support pro-

gram requests.

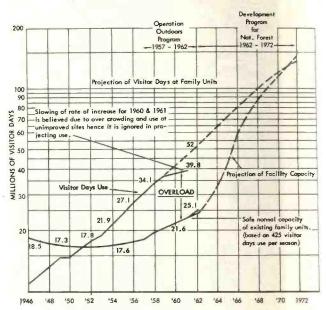
The legislative branch of the Government is responsible for program and budget review and financing. The House and Senate Appropriation Committees thoroughly review the proposed budget and program justifications and hold hearings with the agencies' officials to insure complete understanding as a basis for legislative approval. Agency proposals are subject to adjustment either upward or downward, depending upon the committees' evaluation of program requests and public need. Committee recommendations are presented to the Congress for enactment. agency requests and committee recommendations are further adjusted, when deemed necessary by the House or Senate, to insure full recognition of public needs.



Recreation use is increasing at a faster rate than either population or gross national product.

The manner in which budget presentations reflect the overall recreation resource surveys, long-range planning, and the 10-year Development Program for the National Forests is shown above by examples of chart material included in budget presentations.

#### Relationship of Safe Capacity of Family Units at Camp and Picnic Sites to Actual and Projected Use



### References

U.S. Department of Agriculture, Forest Service: Forest Service Manual, code 6512.

Organization and Management in the Forest Service, chap. 12.

U.S. Department of Agriculture: Administrative Regulations, Title 6.

Bureau of the Budget: Circular No. A-11.

# The Directives System

The directives system includes and communicates to all Forest Service personnel all laws, regulations, orders, policies, standards, and procedural instructions governing Forest Service programs and functions. The purpose of this system is to provide all employees with clear-cut information and instructions to assure consistent efficient performance at all operating levels.

The Forest Service Manual contains laws, the Secretary's regulations, assigned responsibilities, and delegated authorities governing the Forest Service recreation program. Along with this material, the Manual also defines Forest Service recreation objectives and policies as well as organizational responsibilities and authorities.

In addition, the Forest Service Manual contains procedural instructions on how recreation work is to be done, operating policies, job standards, and other instructions necessary to a satisfactory performance of the recreation job.

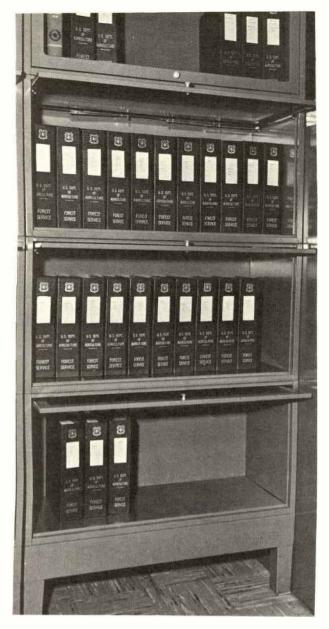
The following material from the Forest Service Manual is a sample of the procedural instructions concerning maintenance of campground units:

2356.14 Campground Maintenance.—Developed camp and picnic sites and improvements will be maintained to (1) meet established standards for public health and safety (FSM 2351.32), (2) present a pleasing and orderly appearance, and (3) extend the period of useful service by repairing damage and preventing deterioration.

In a general sense, maintenance is the process of restoring an item to the standard to which it was originally constructed. Specifications for such work are included under the section dealing with developments and improvements (FSM 2315), where the methods and techniques of actually performing the job are described. This section is concerned with the administrative phases of maintenance: the organization, planning, listing, and scheduling of work to be done.

From an administrative standpoint, maintenance falls logically into two classes, and should be scheduled accordingly (FSM 2352.7):

- 1. Light maintenance.
- 2. Heavy maintenance.



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A complete set of the Forest Service Manual. This directives system is a basic management tool used by the Forest Service to guide its personnel and administer the National Forests and National Grasslands.

2356.14a Light Maintenance.—In this category are all the minor but important repair jobs usually performed by recreation aids during the recreation season in conjunction with the operation of developed sites. It includes safety items which must be repaired on the spot, and those adjustments or repairs which must be made currently if facilities are to serve as intended. Recreation personnel must be trained to handle, alert to detect, and equipped to accomplish these jobs. A work plan will be prepared for each position (sample work plan, FSM 2356.16) and necessary supplies and materials will be provided. The following is a partial list of common light maintenance jobs:

Light Maintenance Jobs

1. Improvements

a. Barriers, Traffic Control, and Fences
(1) Replace, tamp, or reset rocks,
rails, posts and other components
moved, broken, or destroyed, as necessary to sustain function.

(2) Oil, tighten, or secure. b. Bridges, Foot and Vehicle. Replace or repair broken and damaged guard rails and decks to standard of safety and service.

c. Buildings

(1) Roofs: Patch or repair small leaks, remove leaves and other debris, open gutters and drains.

(2) Foundations: Repair or replace screens on vents and ducts, fill or cover holes to exclude insects and rodents.

(3) Walls: Remove dirt or sluff in contact with untreated material, patch or repair holes, repair or replace broken doors, hinges, windows, locks, springs, handles, and screens.

(4) Interior: Repair or replace broken seats and fixtures. Repair

floors to point of safety.

## References

U.S. Department of Agriculture, Forest Service: Forest Service Manual, code 1100.

---- Organization and Management in the Forest Service, chap. 2.

# The System of Workload Organization and Allotment Bases

Workload analysis, a technique of scientific management, is used by the Forest Service to measure the financing and organization needed at each work location. The volume of resource management

business is periodically determined for each unit. Time allowances based on detailed studies are applied to this measured volume of business to develop a workload basis for financing and organiz-

## REGIONAL OFFICE WORKLOAD ANALYSIS

#### 2300 Recreation Management

Job Description and Standards	Correlating and Com-	Computation of Time Allowances—Man-Days										
	puting Basis	R-1	R-2	R-3	R-4	R-5	R-6	R-7	R-8	R-9	R-10	
2300—RECREATION MANAGEMENT												
2330 (2710)—Recreation Special Uses.  A. (2334) Plan and Propose Recreation Commercial Public Service Developments—Study public needs and available sites and schedule offerings of major (over \$75,000 investment)	No. of major winter sports areas to be offered annually.	10 (1. 0)	10 (2, 0)	10 (1. 0)	10 (1. 5)	10 (1. 0)	10 (3. 0)	10 (1. 0)	10	10 (1. 0)	10	
recreational special uses. Selection of permit- tee—prospectus required where competitive demand exists and in all cases of commercial public service with more than \$75,000 invest-	9.0 M.D.'s/offering No. of major resort and other areas to be of- fered annually.		18 (3. 0)					(2. 0) 8	 (. 3)	(1. 3) 5	(. 3) 1	
ment.	4.0 M.D.'s/offering	1	12	4	14	36	16					
	Total, 2330-A	10	30	13	28	45	43	17	1	====	1	
B. (2334) Issuance and Administration of Recreational Special Use Permits—Set standards, guide, review, and give technical assistance in:	20 M.D.'s/region	20	20	20	20	20	20	20	20	20	20	
1. Issuance of permit with more than \$75,000 investment and administration during initial development stage.	Average annual No. of new \$75,000 invest- ment or over recrea- tion permits issued.			(2)	(4)	(5)	(6)	(1)				
2. Issuance of permits with less than \$75,000 investment, administration of all permits	3.0 M.D.'s/permit No. of existing recrea- tion special use per-			6	12	15	18	3		=====		
after initial development, and adjustments to fees. (Does not include complaints and A-10 appeals.)	mits: No. Class I permits_ 0.1 M.D./permit No. Class II and III	21	26	14	35	62	35	(95) 10 (380)	(138) 14 (644)	17	(41) 4 (694)	
	permits. 1.0 M.D./100 per-	13	18	18	16	89	27	4	6	9	7	
	mits. Total, 2330–B	54	64	58	83	186	100	37	40	46	31	
2330—Construction, rehabilitation, and expansion of recreation sites. Set standards, advise, and	20 M.D.'s/region	20	20	20	20	20	20	20	20	20	20	
coordinate program for: 1. Camp and picnic sites.	No. of planned new family units to be built annually. (760) (1760) (700) (2100) (2020)	(2150)	(740)	(740)		(110)						
	4.0 M.D.'s/100 family units.	30	70	28	84	81	86	30	30	35	4	

2. Swimming sites and other special developed sites.	No. of planned new sites to be developed	(8)	(20)	(1)	(5)	(19)	(22)	(12)	(14)	(12)	(1)
	annually. 1.0 M.D./new site planned.	8	20	1	5	19	22	12	14	12	1
	Total, 2330	58	110	49	109	120	128	62	64	67	25
<ul> <li>2340—Cooperation. Maintain cooperative relationships and develop specific cooperative agreements with regional levels of national organizations and with local organizations and agencies. Work with other divisions concerned.</li> <li>A. (2341) Federal Agencies:</li> </ul>	(Does not include project impact surveys. See 2160-B for time allowance on impact surveys.)										
1. National Park Service.	2 M.D.'s/region	(2)	2 (7)	(15)	(8)	2 (6)	(3)	2 (1)	(1)	2	2 (3)
2. Bureau of Reclamation and Corps of	Monument.	1	4	8	4	3	2	1	1		2
Engineers.	No. of existing and planned projects.	(2)	(9)	(3)	(12)	(3)	(19)	(10)	(1)	(1)	(1)
3. Bureau of Public Roads.	1.0 M.D./project 15 M.D.'s/region	2 15	9 15	3 15	12 15	3 15	19 15	10 15	1 15	1 15	$\begin{matrix} 1 \\ 15 \end{matrix}$
<ol> <li>Fish and Wildlife Service.</li> <li>Public Health Service.</li> </ol>	5 M.D.'s/region	5	5	5	5	5	5	5	5	5	5
6. Other.	Total, 2340-A	25	35	33	38	28	43	33	24	23	25

ing each unit. Where appropriated funds are insufficient to accomplish all measured jobs, those of lower priority are deferred or eliminated and an amount of work to fit available financing is programed.

#### **Workload Measurement**

Recreation volumes of business are based on annual statistical reports of recreation use by the public, and on periodic inventories of recreation improvements and facilities.

## Workload Analysis

Time factors are developed by studies designed to determine project costs of recreation care, policing, and maintenance. The managment of recreation projects and the broad jobs of managing the recreation resource are also studied at each organization level. Time factors developed in these studies are applied to the measured volume of business to determine the current recreation workload of each unit at each level of organization. Change in the fluctuating project workload is recognized annually. The broader, more stable managerial workload is updated every 3 to 5 years.

# Organization and Delegation of Authority and Responsibility

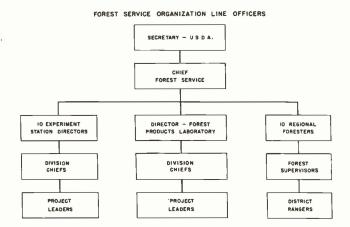
Measurement of the recreation workload on administrative units establishes the organizational requirements in terms of numbers of people. Standard principles of organization are then applied to establish positions or a chain of command. The line officer in charge of each adminis-

trative unit is accountable for the accomplishment of the recreation workload on his unit in keeping with established objectives and policies.

Authority to administer the recreation activity is delegated to line officers in charge of administrative units. The degree of authority delegated for specific actions is defined in the Manual.

The chart below shows the line organization responsible for administering the total program of work and for attaining the objectives of each function.

The tabulation on pages 10-11 shows the way in which the workload measurement and job responsibilities are developed for Regional Office recreation management staffs.



### References

U.S. Department of Agriculture, Forest Service: Forest Service Manual, code 1200.

Organization and Management in the Forest Service, chap. 3.

# **Operational Systems**

Operating plans provide for action by translating programs into men, materials, and money. In the Forest Service, operating plans detail the specific work which can be accomplished with currently available funds.

## **Program Operating Plans**

Program operating, or action plans identify the specific work to be done by the various segments of the organization or by individuals during a limited period usually the fiscal year.

limited period, usually the fiscal year.

a. Short-Range Objectives and Goals.—These are established in the National Forest Development Program and the Research Program. For State and Private Forestry such goals and objectives are part of the annual program of work for the Chief's office.

Examples of recreation resource objectives in the program include:

(1) Providing adequate sanitation, cleanup, safe water, fire prevention, and public safety at all developed recreation sites and in heavily used unimproved areas.

(2) Preparing complete recreation management plans for all administrative units

and thereafter keeping them current.

(3) Completing the reconstruction and rehabilitation of 2,160 camping, picnicking, and other recreation sites containing 16,400 family camp and picnic units.

b. Programs of Work.—Programs of work are statements of major jobs to be accomplished by designated organizational units and individuals within specified periods. These programs are prepared by the Chief for the Service as a whole; by the Regional Forester for the guidance of his staff and Forest Supervisors; and by the Experiment Station Director for his organization.

The recreation portion lists the priority recreation jobs to be accomplished, shows the assigned responsibility, and sets quotas and time limits.

Programs of work do not list the entire work-

load for the specified units or individuals.

Chief's Program.—The following are recent typical jobs listed in the Chief's Annual

Program:

(1) Give leadership to avalanche study. Direct the development of avalanche hazard prediction and control studies at Alta, Berthoud Pass, and Stevens Pass. Encourage appropriate use of results at all ski areas. Support cooperative projects with Corps of Engineers (SIPRE) for testing explosives best suited to release avalanches.

(2) Give leadership to the National Forest recreation management plan project with the objective of completing plans for all National Forests by June 30, 1964, and for selected rec-

reation areas by June 30, 1965.

Regional Forester's Program.—This program indicates the type of work that will be done in the Region to carry out the Chief's program. For example:

(1) On a priority basis, develop facilities on existing reservoirs: Dumont Lake, Routt N.F.; Spring Creek Lake, Gunnison N.F.; Rainbow Lake, San Isabel N.F.; Wilbur Lake, San Juan N.F.

(2) Forests prepare Forest recreation plans

in first draft on or before August 1.

c. Work Plans.—The Forest Service has developed a uniform system for the detailed planning of work at the Forest, District, and research project levels. These work plans show specifically what will be done, who will do it, when it will be done, and the time and finances needed.

For recreation, such a plan would show the crew's equipment and material needed for each recreation project. It would also show the work planned by managers—i.e., supervisors, rangers, and their staffs—for management of recreation projects and for general management of the recreation resource.

Following is an exhibit from the Uniform Work Planning System. It shows the types of detailed management planning for the recreation resource done at the Ranger District level.

USDA-FOREST SERVICE  1300-3 (Rev. 1/60)  ANNUAL WORK PLAN		F.Y.	Y. ADMINISTRATIVE UNIT (Forest, etc.)  Sample Forest					uB-uni ample	PAGE NO.			
	D.M.A. PLANNED HOURS BY IN								BY INDIVI	DIVIDUALS		
io. OB	OB DESCRIPTION	(b)	Scheduling VOD PIEC	(c) (d) (e) Ni-5.				The Car	St. As	/	LCCOM A	
2300 Re	creation Management	(6)	(6)	(d)	(e)	(1)	55 (6)	(6)	(1)	(j)	(k)	(I) F (m
Participate in	schedule RO-GFI** forest recreation plan	Sept.		24	16	8						
training meetin		Winter Apr.		16 8	8 8	8						
	ded for Middle Piedra	ummer		20	4	16						
	ata and prepare area plan	Winter		40	4	36						
	eting with Asst. Ranger trict Asst. on installing											
work	unit, including barrier	Spring		14	6	4		4				
Train crew assi	gned rec. cleanup and	ummer		8	8			(80)				
plain "Operation		Spring		18	6	4	4	4				
maintenance (fo		25-9/5				(96)		(80)				
day provided)		20-3/	15	16	16							
reports, inspec		earlo	ng	90	50	40						
	tion management			254	126	116	4	8				
	rict Managerial Account lice - General Functional In	spect	ion									

SHEET B
National Forest Protection and Management summary of allotments—by regions and classes of items

Fiscal Year 1963

Allotment item	One	Two	Three	Four	Five	Six	Seven	Eight	Nine	Ten	Total
RECURRENT MANAGEMENT BASE FUNDS PROJECT FUNDS						,					
11. Recreation—public use:  (a) Aides, policing, and mainte- nance (b) Visitor informa- tion service (c) Rehabilitation,	\$238, 000 53, 500	\$653, 000 67, 500	\$442, 000 87, 500	\$756, 000 69, 500	\$1,070,000 103, 500	\$804, 000 57, 500	\$256, 000 63, 500	\$497, 000 76, 000	\$232, 000 94, 500	\$70, 000 52, 500	\$5, 018, 000 725, 500
construction, and special items (d) National forest	815, 000	1, 675, 000	1, 437, 000	1, 836, 000	2, 100, 000	1, 465, 000	820, 000	1, 441, 000	774, 000	420, 000	12, 783, 000
recreation surveys and plans	80, 000	80, 000	80, 000	80, 000	80, 000	80, 000	30, 000	80, 000	70, 000	40, 000	700, 000



F-498323

Effective management of the wildlife resource on the National Forests enabled 5 million big-game hunters to harvest 682,000 animals recently. This number represented about 15 percent of estimated big game living all or part of the year on the National Forests and National Grasslands.

#### Financial Plans

Essential to program and work planning is the preparation of a correlated financial plan. Financial plans provide each operating unit with a systematic method for expressing the estimated obligation of available funds in advance in accordance with work plans, and facilitate work plan adjustments to reflect the current situation.

Recreation jobs on the work plan do not become "operational," or in a position to be accomplished, until available funds are assigned to them. This assignment is made on the financial plan.

a. The Budget.—The budget has dual application: (1) as a presentation of requests for funds, and (2) as an overall administrative allocation

and plan for the use of any available funds. Recreation finances are indicated as available on budgets or allocations of amounts of money from higher to lower administrative levels. Operating and financial plans are formulated on the basis of approved budgets.

b. Allocations.—The system of allocating funds prescribes the procedures by which funds are distributed. Two kinds of authorizations are used for allocating funds in the Forest Service.

(1) Allotments.—These represent the lowest monetary level of legal apportionment and formal control of funds. Allotments are made only from the Chief to Regions. Allotments to finance recreation programs are made to Regions as part of the fiscal year allocation packages. Recurrent recreation management and general administration jobs are included as "Base" items in the Chief's allotments. Recreation project funds are shown as an identifiable allotment item. (Sheet B, p. 14.)

(2) Allowances.—These effect the distribution of funds below allotment or regional levels. Allowances are made by the Regional Forester to National Forests and by Forest Supervisors to Ranger Districts. They are authorizations representing the monetary limits of expenditures. Allowances to finance recreation programs on the National Forest are transmitted by the Regional Forester to the Forest Supervisor as a part of a fiscal year allocation package. These allowances are the basis for operating and financial plans.

## References

U.S. Department of Agriculture, Forest Service: Manual, codes 1313 and 1314.

Organization and Management in the Forest Service, chap. 4.

- Forest Service Manual, code 6523.

Organization and Management in the Forest Service, chap. 12.

# **System of Controls**

Program Controls and Review.—The Forest Service mission is carried out through the work performed by its employees in the organizational units. Controls are established to assure that these organizational units work toward a common objective and that requirements of law, regulation,

policy, and procedure are followed.

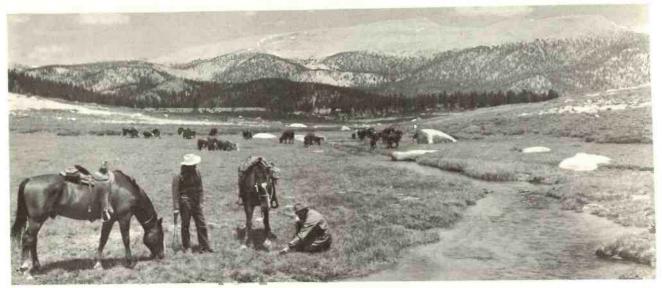
Control of a decentralized organization is maintained through assignment of program and work responsibilities; delegation of authority; allocation limitations; and a system of review and appraisal to determine whether responsibilities are being met within the authority delegated. The Forest Service employs such controls to assure fulfillment of assigned responsibilities at all organizational levels. Meeting recreation objectives by

accomplishing tasks in the recreation program is an important part of this responsibility.

Forest Service program control systems operate to make sure that the efforts of the organization are directed toward the established objectives, in accordance with prescribed laws, regulations, and policies; meet adequate standards; and employ the most efficient and economical methods. Forest Service controls are also used as management tools to train inspectees and to disseminate improved methods of work performance. These control systems include:

## Inspection

Inspection is a review and appraisal activity. It determines for each line officer if, and to what



F-497600

Forest Service officers checking the condition of a western range. Conserving the land and its plant cover to provide forage for livestock is a primary aim of range management on the National Forests.

extent, delegated authorities are exercised and assigned responsibilities redeemed. Periodic inspections are conducted to assure proper administrative control of functions, operations, and programs. Types of inspections are as follows:

a. General Integrating Inspections.—These are made to determine the overall effectiveness of all Forest Service activities, including recreation, within a given territorial unit. By appraising the effectiveness of integrated program effort, a general integrating inspection determines how well National Forest resources are contributing to the social and economic needs of the community and the Nation.

b. General and Limited Functional Inspections.—These are made to review and appraise the effectiveness of a specific function or activity, such as recreation. All phases of the function are checked within the scope of an organizational unit. Limited functional inspection provides a check on the effectiveness with which one or more, but not all, phases of the specific function or activity within an organizational unit are being performed. A limited functional inspection of winter sports sites, for instance, would cover that part of the recreation function related to approved policies, plans, and instructions.

## Program Reviews

Periodic Review of Broad Management and Appropriation Needs.—Public use of National Forest lands materially affects program and appropriation needs. In each land use activity, annual statistical reports are required from each management unit. Trends apparent from the summary and analysis of these statistical reports are the basis for periodic adjustment of broad

management plans and appropriation requests. An example of a trend analysis for recreation is the graph on page 8. Data from annual statistical reports are also used in the previously described workload analysis system to determine volume of business on each management unit.

Periodic Review of Accomplishment.—At the lower levels of management, there is a need to review accomplishments and financial needs several

times a year.

As a feature of the National Forest Uniform Work Planning System, current and periodic appraisals are made of "where we stand" with relation to planned work, planned finances, and estimated needs to the end of the fiscal and planned year. The unit manager periodically evaluates the point to which his recreation program has progressed by checking adherence to work plans and the accomplishment record. He then determines what is still to be accomplished, and the probabilities of work completion based on available funds.

These reviews may indicate that adjustments are needed in either financial plans, work plans, or both to assure that management objectives be met

within available fund allocations.

Reporting program accomplishments and financial status to higher management levels provides information required for several purposes. Accurate and complete reporting facilitates:

a. Coordination by top management of overall accomplishment by all units toward the broad recreation management objectives and goals of the Forest Service.

b. Determination of priority recreation jobs for the year ahead and their related financial

requirements.

c. Support of performance budget commit-

ments by providing accomplishment and re-

d. Awareness of current status of apportionment and obligation of appropriated funds.

e. Factual reporting to the general public which is a responsibility of a tax-supported agency.

f. Budget request support by providing factual data testifying to a history of meeting previous performance commitments.

#### Internal Audit

Internal audit is an independent and objective appraisal to determine the propriety, legality, and

effectiveness of the functions of management. Operations under the recreation function are one of the activities appraised by Internal Audit on a continuing basis. The focus of this appraisal would be on whether or not these operations were being carried out in a legal, economical, and effective manner, and in accordance with prescribed Manual instructions.

## References

U.S. Department of Agriculture, Forest Service: Forest Service Manual, code 1440.

Organization and Management in the Forest Service, chap. 5.

# Summary

Large organizations must have well-designed systems of management to perform each of the tasks that an efficient manager of a small organiza-

tion can do personally.

The material in this booklet describes the systems on which the Forest Service depends to manage its large and widespread organization. These systems are designed to make the agency responsive to public needs expressed directly or through their elected representatives. The systems are also designed to insure that program and financial controls are adequate and that methods used are efficient.

Each management system is considered as a tool which can quickly become obsolete. Major reviews of results produced by each system keep them up

to date and coordinated.

There is an interrelation between all of the systems described. Broad management planning and appropriation requests are the product of careful on-the-ground planning and work inventory. They also rest on analyzed trends in public use and on the capability of the Forest Service to meet the demands of this use in an appropriate manner.

The Directives System provides uniform instructions and standards for each level of the organization.

Workloads and organization are realistically determined to provide the number and kind of people needed at each level for efficient performance.

Programs and work plans for each National Forest work unit are tailored to available finances so that appropriated funds will be equitably allotted for the highest priority work. The focus of this work planning is on work accomplishment.

Research is organized to provide needed answers with maximum expert attention to individual line

projects.

Cooperative work on State and private forest lands is planned and financed for areas that need management.

Control systems are designed to spotlight poor practices and to encourage the use of improved

methods.

And finally, each system feeds back information used to adjust and improve basic objectives and broad plans for reaching goals.